

ABSTRACT

The resynchronization of multiple copies of a database after a divergence in transaction history is provided. In an illustrative implementation, algorithms are provided for synchronizing multiple copies of a database upon the occurrence of a divergence in transaction history. A data environment is provided having a database and a copy. The database environment operating in a manner where the database records some transactions and the copy recording some later transactions, but neither having an up-to-date set of data or log of data changes. In operation, the database and its copy compare transaction log sequence numbers to discern the changes database and/or database copy pages. During resynchronization, the database and/or its copy sends page specific information about changes that have not been performed on each other respectively. In this manner, the data environment may be resynchronized with minimal data transmitted and without a requiring a complete restoration of the database.